DOCUMENT RESUME

ED 295 381 EC 202 819

AUTHOR	Keenan, Joseph S.
TITLE	First Aid for Aphasia: Home Exercises.
INSTITUTION	National Easter Seal Society for Crippled Children and Adults, Chicago, Ill.
PUB DATE	Jul 87
NOTE	21p.
AVAILABLE FROM	National Easter Seal Society, 2023 West Ogden Ave., Chicago, IL 60612 ($1.10 plus $0.75 postage and handling).
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Anxiety; *Aphasia; *Etiology; *Speech Therapy; *Therapeutic Recreation
IDENTIFIERS	*Agnosia; *Apraxia (Speech)

ABSTRACT

This pamphlet is designed for use by nonprofessionals as a guide to providing speech therapy for persons with aphasia. It includes an introduction that reviews the causes of aphasia, its immediate effects at onset, and the reactions typical to persons who develop aphasia. Uncomplicated aphasia is described first with eleven specific therapy suggestions to help overcome it. Among these are singing familiar songs, counting, naming days of the week in series, playing simple games that require little talk, labeling things, and reading sentences aloud. Following that, the three most common complicating patterns are described and additional therapy techniques are suggested for each. Goals for persons having aphasia with apraxia of speech are provided which include specific lists of sounds, words, phrases, and sentences for the person to imitate. The suggestions for persons having aphasia with auditory agnosia focus on practice in careful listening and describing what the person sees. Advice for persons with aphasia complicated by confusion or anxiety includes avoiding asking him or her to make decisions, concentrating on words and materials the person knows and uses well from habit, and using a calm, soothing manner. Names and addresses of organizations to contact for additional information are appended. (VW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED295381

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Marian Petkovsek

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

First Aid for Aphasia

home exercises

Pro-Ed Stock

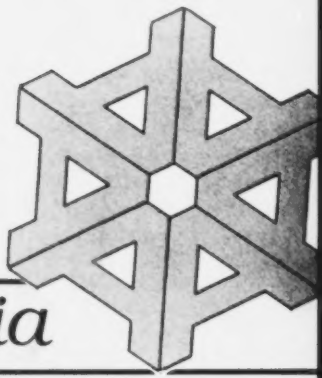
By
JOSEPH S. KEENAN, Ph.D.

EC 20 2819

BEST COPY AVAILABLE

Copyright © 1987 by
National Easter Seal Society
First published in 1974 as *First Aid for Aphasics*

By
JOSEPH S. KEENAN, Ph.D.



First Aid for Aphasia

home exercises

Easter Seals

The Author...

Joseph S. Keenan, Ph.D., studied speech pathology at the University of Virginia and the University of Florida, from which he received his doctor of philosophy degree. A resident of Georgia from 1962 to 1972, he was a speech pathologist at the Veterans Administration Hospital in Atlanta and also taught and maintained clinical duties within the School of Medicine at Emory University. He served as president of the Georgia Speech and Hearing Association and as editor of the Association's *Journal*.

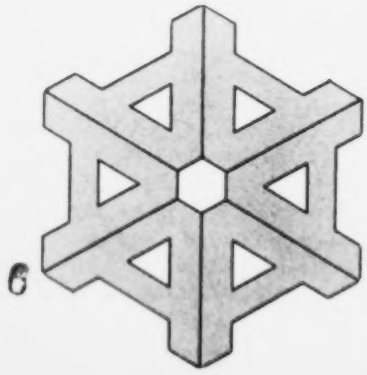
Dr. Keenan's primary professional interests have been in the field of aphasia therapeutics. He has published articles on this topic in the *Journal of Speech and Hearing Disorders*, *Archives of Physical Medicine and Rehabilitation*, and *Cortex*. He designed the first commercially available programmed therapy for persons with aphasia (published by Bell & Howell Co. for the company's *Language Master*); has written a manual on speech pathology with adults who have brain injuries; and is the senior author, with E.G. Brassell, of the *Aphasia Language Performance Scales*. Since 1972, Dr. Keenan has held the position of Chief, Audiology and Speech Pathology, A.C. York Veterans Administration Medical Center, Murfreesboro, Tennessee. He is an assistant clinical professor at the Vanderbilt University School of Medicine and a member of both the Tennessee Speech-Language-Hearing Association and the American Speech-Language-Hearing Association.

Foreword

Every day there are people who, through brain injury or disease, develop speech and language problems. Sometimes a speech-language pathologist is readily available to help, but often there is no such specialist nearby to turn to. What should be done? What pitfalls should be avoided? For lack of answers, the person, the family, and all who want to help can become frustrated. Families, in particular, and others who provide care in some way, need clear guidance if they are to succeed in aiding a person with speech and language problems to communicate more effectively.

Fortunately, there are many helpful steps that can be taken. The purpose of this booklet is to describe those steps and so ease at least some of the frustrations involved. *First Aid for Aphasia* is a simplified guide to speech therapy for the person who has aphasia. It is brief and generalized, but the instructions it contains should prove practical when studied then adjusted to fit an individual's particular needs. This booklet should help anyone interested to get a person with aphasia started on the road to recovery. It might have been subtitled *What to Do Till The Speech Pathologist Arrives.*

– J.S.K.



Introduction

Aphasia is a disability in communicating with language. Persons who have aphasia can still communicate in some ways. They can understand facial expression, tone of voice, and general attitude and can usually let you know their feelings and emotions as well as they ever could. Their difficulties are in the use of words. Persons with aphasia have trouble expressing themselves both in speech and writing, and they have trouble understanding both speech and writing.

Aphasia appears most often as the result of stroke, a malfunction of some blood vessels in the brain. Aphasia may be caused also by external injury to the brain, such as a gunshot wound or a severe blow, or by a brain tumor or other brain disease. The condition can range from very mild to very severe, and it is frequently accompanied by physical limitations – weakness or paralysis on the right side of the body and sometimes visual disturbance.

Persons who develop aphasia are often dazed, confused, and badly frightened. They may be overwhelmed by the sudden inability to do or say much of anything. In most instances, they are at their worst the first 24 to 48 hours after onset of the condition. Most, however, begin to feel better and become more alert rather quickly. As they begin to recover, it becomes obvious that their difficulty in talking does not mean they have lost their mind. Persons who have aphasia are still the same individuals they were, and they almost always can improve to some degree. Some improvement may be spontaneous; it just happens. It is possible to help, however, and anyone who understands the guidelines in this booklet can provide that help. Persons who have aphasia don't need pity. They don't need pampering. Most of them don't need hasty removal to a nursing home. What they need most of all is lots of encouragement. They need their families and friends close by, saying in action more than in words, "You're still OK with us."

First Aid for Aphasia

Aphasia is not the same for all people. Although all persons who have aphasia share some problems common to the disorder, many have complications. This booklet describes *uncomplicated aphasia* first and gives therapy suggestions to help overcome it. Following that, the three most common complicating patterns are described with additional therapy techniques suggested to help overcome each. These complications have been called *aphasia with apraxia of speech, aphasia with auditory agnosia,* and *aphasia with confusion or anxiety.*

Most people inexperienced in providing therapy are concerned about doing something wrong and consequently making the condition worse. Little harm can be done when these rules are followed:

Do not urge the person on too strongly.
Set each goal a little below the person's real ability.
When in doubt, reduce your demands.

This will assure the person of success and give solid base to each step of improvement. At the beginning, work slowly and for short periods. Set the individual to work at something you feel sure can be done. In this way, you will gain confidence together knowing what is possible and what will be required.

"Persons who have aphasia are still the same individuals they were, and they almost always can improve to some degree."

Uncomplicated Aphasia

When the doctor tells you the person you are concerned with has aphasia, you will want to find out whether the condition is complicated in one of the ways described in this booklet or whether it is the basic, uncomplicated variety.

Although persons with uncomplicated aphasia can usually speak words clearly, what they say may make little sense. They typically know what they want to say, but their sentences come out incomplete and mixed up. The usually *understand speech* much better than they *produce* it, but they will show some degree of loss in all four language functions – listening, talking, reading, and writing.

The listening difficulties are sometimes severe; on the other hand, they may not always be apparent unless you look for them. Because their facial expressions, gestures, and actions are so often appropriate, these persons can lead you to think they are understanding everything they hear when in reality they are responding to what they see. "Good morning," you say to Mr. Jones *as you come in the door.* "It's time for your medicine," you inform him *as you come with the pill.* "It's time for your breakfast," you remind him *as you bring him his tray.*

In its most common form listening difficulty shows up as an inability to fully understand sentences unless they are very short. This means that the person has more-than-average difficulty following instructions. Some can point to any single picture named, but cannot point to two or three named together in series. They may fail to hold in mind an instruction containing more than one idea, such as "After you have seen the doctor you are to go to occupational therapy, and don't forget your glasses." Also, they frequently have more-than-usual difficulty understanding someone who talks quickly or who changes the topic suddenly.

The talking impairment of uncomplicated aphasia shows up primarily as difficulty in word finding. This means that there will often be hesitancy in speech; the rate of speech will be slow and there will be many pauses. The person will sometimes use a wrong word while talking, such as saying *window* when meaning *door* or *no good* when meaning *I want more.* You may hear a mixed-up sentence such as "I can see it, but I can't see it." Also, the person may produce misarticulated, almost-right words, such as counting *one, two, thee, tho, they* or saying *pencil* for *pen* or *meak* for *meat.* Reading ability is usually markedly reduced. Some of the difficulty may be due to a loss in visual function; the person may simply not see as well as before. But more than this, persons with aphasia typically have marked

difficulty in understanding the words they can see. Many complain that the lines of print seem to "run together." Their enjoyment of magazines may be reduced to looking at pictures. Reading a book usually becomes impossible.

Writing is nearly always badly impaired. Those who are right-handed may indeed have difficulty holding and controlling a pencil in that hand due to weakness or slight paralysis of it. Often, however, even with a functioning hand, the person can do no more than copy. If writing is possible at all it is almost always badly composed and badly spelled. Sometimes it will be a scribble; some letters may look as if they should form words, but don't; some words may make no sense.

Those whose pattern of impairments fits the above descriptions may be classified as having uncomplicated aphasia. Following are some suggestions for speech therapy procedures to apply:

1 Make an extra effort to **talk *with* rather than just *to* the person.** Try to get some kind of conversational exchange. Most people tend to talk less to those who don't talk much, but try to talk more. Language stimulation is needed.

2 **Allow enough time for response.** Persons with aphasia often think more slowly than others and need a longer time to get their words out. Many talk much better when they do not feel rushed.

3 **Don't talk for the person, but give help when needed.** You can discourage talking by giving either too much or too little help. Let the person try to talk; suggest a word only when you notice struggling or indications of giving up. Be careful to keep your manner encouraging rather than correcting. Treat the person as you would want to be treated.

4 **Encourage all speech efforts.** Many persons who have aphasia talk less than they are able; they seem to be afraid of failing. Praise speech attempts; say immediately how pleased you are with the speech. Only through trying will speech be improved.

5 **Practice singing familiar songs** if the person enjoys singing. Find a simple, familiar song and sing along. Most individuals with aphasia can sing better than talk and will be pleased at doing this – or anything – well.

6 **Help with counting** – something most adults have learned to do automatically. Start with the one-to-five series and count together. Repeat the numbers slowly and clearly, using your fingers as visual aids. Use printed numbers, too, if they encourage response. The aim is not to challenge or to make the person think but to set off an automatic response.

When counting begins to come easily, fade your voice and let the person you are helping take the lead. Still later, let the person count alone. Be ready at all times to supply a number to imitate if the person gets stuck.

When the one-to-five series is mastered, extend the series from one to ten and, later, from one to twenty. Be sure that one step is accomplished solidly and that the person can perform it consistently before going on to the next.

7 **Practice naming the days of the week in series.** Like counting, this is a good task to practice in the early stages of recovery. A large calendar may be a helpful visual aid. Point to each word as you say it. Repeat the series, naming the days no quicker than one per second and keeping a steady rhythm in your speech. Repeat two or three times, asking the person to look, listen, then join you. Continuing to try is important even when progress is slow.

Some find it easier to start with Sunday in naming the days, others prefer Monday. Let the individual decide. Your aim should be to revive old, well-learned patterns, whatever they may be. As with counting, gradually withdraw help when the person with aphasia begins to repeat the series alone.

8 **Play simple games that require little talk.** In hospitals, other patients and volunteers can be recruited to help; at home, family members and friends can join in the play. Encourage games such as checkers or dominoes or a card game such as Battle. (In Battle, all cards are divided equally among two or three players. Each person plays the top card from his or her stack, and the high card wins the trick.) When speaking ability improves, choose games demanding more talk, such as Go Fishing or those in which you spin a pointer and move individual pieces along a track. The games should be pleasant and relaxed, creating an atmosphere where talk is encouraged, but not required. Talk comes best when it comes without effort.

9 If reading helps, **put labels on things** in the surroundings. Sometimes persons with uncomplicated aphasia have equal difficulty in naming objects and in reading the names aloud. Seeing the object together with the printed name can often help. If you show ten pictures and the person identifies some correctly, then you show the same ten pictures with the name of each printed beside it and more are identified correctly, it is likely that the printed words are giving some help. In that case, you might put labels on various objects in the room – the bed, chairs, table, robe, lamp, etc. Using large, clear print, make a menu card for the person's food tray. Make a large name tag for yourself and for others who come in or visit frequently. In hospitals, this includes all ward personnel.

Get the person used to working together on words, an effort you can usually combine with something else. For example, when getting the person to put on a pair of slippers, you might say, "Now, here are your *slippers*. You put your feet in the *slippers*. Here is your left *slipper* and your right *slipper*. What are they? Right, your *slippers*. Good." If you are offering water for help in taking a pill you might say something like, "Here's a glass of *water*. You take your pill with the *water*. I poured you some... Right, some *water*. That's good."

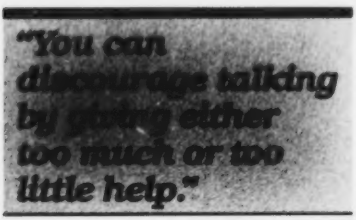
10 When the person can read and speak in single words, but breaks down at the sentence level, **help by reading sentences aloud.** Write ten short, simple sentences and ask that the first be read aloud. Then you read it. Compare the two, making any needed corrections. Encourage second attempts. Then try the next sentence together. Most need to work with a group of sentences for several days before they can begin to read them well and correctly.

Observe response to your sentences. If most are repeated correctly and reading seems to improve with practice, the level of difficulty is probably about right. If the person reads them well and accurately the first time, make them a little longer or give a paragraph to read. On the other hand, if there is struggling or stumbling and if errors are made frequently, the sentences are likely too long or complicated. Shorten them to phrases and make them longer only as ability to read them improves.

11 Help with writing or printing. Most persons with aphasia have lost the use of the right hand, but can learn to use the left hand satisfactorily. It doesn't matter whether the person writes or prints, although printing, especially in capital letters, is usually easier to control. It is usually helpful to begin with large-sized pencils such as those used in first grade.

Most need to practice copying before they try writing even simple things from memory. Copying numbers can be a good start. Find some large, clear models to copy and provide plenty of paper for practice. Either say yourself or ask the person to say each number as it is copied to help rebuild association between the quantity, the printed number, and the spoken number. After a while, ability to write numbers that are read in mixed order should develop.

The same pattern applies generally to the writing of words: persons with aphasia can usually copy before they can write words read to them. Because words are more complicated than numbers, they are more likely to be troublesome. A good word to start with is the person's own name. Most are likely to remember how to spell their name and, therefore, be motivated to write it. Go on from there to common, simple words, expanding the spelling vocabulary as ability increases.



Complications

Aphasia with Apraxia of Speech

In this complication that frequently occurs with aphasia, individuals appear to have suddenly and strangely lost control of their lips and tongue. Their mouth is not paralyzed; they can chew and swallow all right, but to some degree they cannot repeat simple words or speech sounds. Apraxia of speech usually appears as a profound impairment in speech production. Persons with this complication are much less able to repeat vowel sounds or to count to five than they are able to understand instructions to do so. These persons are usually very much aware of their difficulty and are likely to show great effort and strain in trying to speak.

Following is a list of seven "goals" for persons having apraxia of speech and tips for those who want to help. They are steps that can lead from the making of simplest speech sounds to the saying of short sentences – all through imitation. Although imitation is a slow process, it can best prove beneficial when those who want to help follow procedures such as these:

Slow your own speech way, way down. For the phrases and sentences in Exercises 5, 6, and 7 that follow, one second per syllable is not too slow. This will help the person hear the changes from one sound to another. Going slower will also help assure that your pronunciation is careful and easier to imitate.

Have the person watch your mouth as you say things to be repeated in order to see how the sounds are made. Keep reminding the person to watch.

Combine repetition and demonstration with explanation. For example, say, "Start this with your mouth open," or "Remember to put your lips together," or "Touch your tongue tip to the top of your mouth." If you are not sure about what you do to produce the various sounds, watch yourself in a mirror and try to feel where your tongue goes.

Don't push too hard. Remind the person frequently to lean back, relax, and take it easy. Speech must come in an easy, natural way to be effective. No one can force the words to come out, but you can ease the way by providing step-by-step guidance.

Goals for Persons with Apraxia of Speech

1 Imitate accurately, in nine out of ten attempts, at least two distinct vowel sounds from a list of several heard. Although there will be differences, most will find it easiest to imitate the vowel *ah*. The other vowels should be chosen from this list:

oo as in *moon*
o as in *go*
ay as in *hay*
ee as in *see*

Occasionally, some will find it easier to begin with *ai* as in *eye* or *uh* as in *run*.

---

2 Imitate accurately, in nine out of ten attempts, at least one consonant sound. The consonant usually repeated most easily is *m-* (not the letter, but the humming sound it represents). Other consonant sounds that many find relatively easy to repeat are those represented by the letters *b, w, n, l,* or *d*.

---

3 Imitate accurately, in nine out of ten attempts, at least two different syllables that combine vowels and consonants already learned. The syllables may be nonsense or real words. The sounds of *ah* and *m-* may be combined as *ah-m* or *ma-*, or *mom*, or *mama*. If the *o* sound has been produced as well, possible combinations are *om*, or *mow*, or *omo*. Those who can make the *w* sound may learn to repeat *wa-*, or *we*, or perhaps *one (won)*.

---

4 Imitate accurately, in nine out of ten attempts, at least five different simple words, such as those from the following list:

mom (or mama)	bye (for good-bye)	one (or won)
moon	no	wall
man	nose	watch
mouse	now	water
milk	nail	well
more	knee	warm
me	noon	wood
my	eye	wool
ball	eat	look
boy	ear	laugh
bee	arm	light

baby	yes (or yeah)	law
bowl	umh-humh (for yes)	lock
book	aim	lie
bat	egg	

5 Imitate clearly enough to be understood, in eight out of ten attempts, at least five simple two-word phrases. Among the phrases suggested for this goal are the following:

my man	my baby	some more	bad boy
my mom	her baby	two more	baby boy
my milk	your baby	no more	many boys
watch it	eat some	thank you	lie low
warm milk	aim well	that's right	lock tight
one book	apple pie	those two	ladybug

6 Imitate clearly enough to be understood, in eight out of ten attempts, at least five simple three-word phrases. The phrases should be chosen so as to emphasize speech sounds that are fairly easy for the person and to avoid speech sounds that are particularly difficult. Some useful phrases may come from the following list:

put it down	a big dog	listen to me
on the bed	pen and paper	fair and mild
one more time	tie a knot	down the well
no I don't	let it up	bacon and eggs
in my house	about two feet	yes and no

7 Imitate clearly enough to be understood, in eight out of ten attempts, at least ten sentences of four or five words each. Again, the sentences should be contructed so as to emphasize fairly easy speech sounds and to avoid particularly difficult ones. Sentences should be loaded heavily with any sounds that the person produces correctly part of the time, because those are the sounds most likely to improve with practice. Some examples follow:

To emphasize *d*:	To emphasize *f*:
The dog is lying down.	It's five forty-five.
Don had a dime.	Fill it up for me.
Do you doubt it?	Find it for fun.
Doris and David are here.	Feel it with your feet.

To emphasize *n*:

I know Ned and Nan.
Nobody knows my name.
I don't have any money.
Now it's nice and new.

To emphasize *p*:

A piece of apple pie.
Open up the paper.
The poor puppy is panting.
People pay the piper.

To emphasize *l*:

Look at the lovely lilies.
Let's follow along the lane.
Leave the old lady alone.
Listen. They are laughing aloud.

To emphasize *b*:

Buy the baby a ball.
I'm able to bounce back.
Bob bought a big bag.
The boy has been bad.

Aphasia with Auditory Agnosia*

This is a complication in which persons often act as if they had a hearing loss. The "hearing loss" does not seem to be total, and the degree of loss seems to change. Some will struggle and strain to understand spoken sentences, but understand written sentences easily. They are usually well aware of their listening impairment and frequently ask "What?" Some, however, show no awareness of their errors. Their difficulty appears when they answer a question other than the one asked or follow an instruction by doing something different from what they are told.

These persons typically talk a great deal and produce speech sounds easily. However, they usually do not talk very meaningfully. They may mix nonsense words (jargon) in with real words. An example is the person who, when asked to tell his real name, answered, "One five two eight Vienelzuz Corridge. Yeah, that's right." They may talk around and around a point without coming to it. Sentences may be badly structured.

Persons with this pattern of impairment will generally respond to the procedures for uncomplicated aphasia, but need additional help to work on their special complication. Following are procedures for aiding those with auditory agnosia:

1 **Give practice in careful listening.** Because there will be trouble understanding conversational speech, the person can often be helped to understand better when asked to associate spoken words with pictures. Show pictures of two differ-

* *This condition is also known by such names as word deafness, transient auditory imperceptions, Wernicke's aphasia, receptive aphasia, and sensory dyspraxia.*

ent common objects (a bed and a car, or a shoe and a radio, etc.) and name one for the person to point to. If a wrong choice is made, show immediately the right choice and repeat the name. If a correct choice is made, give praise. For example, if the person points correctly to the car, say immediately, "Right. That's the car." Then present the next pair of pictures. Arrange different pairs at different times and in different orders.

If pointing to one of two pictures is very easy, present four pictures together. Speed, accuracy, and consistency in pointing to the one named should increase with practice.

2 **Combine listening practice with reading.** Show a list of words, phrases, or sentences (whichever gives only a little difficulty) and ask the person to point to the one you read then to repeat the word, phrase, or sentence after you.

3 Give **practice describing in phrases what the person sees.** For example, ask for answers to the question "Where is the pencil?" as you place the pencil in your pocket, on the desk, under the chair, etc. Those whose writing is good can write their answers themselves. Answers can be written for others then discussed. You can point out possible errors made in phrasing or word choice to foster improvement.

When good, clear phrases are produced consistently, work on sentences. Ask, "What am I doing?" as you turn on the light, pour a glass of water, take off your shoes, count your change, etc. As above, if you write down what the person says and follow up by helping to find and correct errors, the errors will be caught before the person says them and speech will begin to sound more and more natural.

Aphasia with Confusion or Anxiety

Persons who have aphasia are typically confused for a few days after the onset of brain damage, and most are anxious occasionally about their condition. In some, however, the confusion or anxiety persists. Although they may show flashes of much-improved communicative ability, their day-to-day performance is poor, held down by the confusion or anxiety.

Confusion usually comes to persons in the older age bracket and reflects the generalized pattern of senility. By the things they say or do, these persons may indicate that they don't know where they are, what month it is, why they can't do whatever they like. Anxious persons may be of any age. They are

usually very much aware of their limitations and very intolerant of them. Their anxiety is probably an impatience to get better, a positive reaction that ironically doesn't help. What does help is the same for persons in both of these categories. Following are some suggestions to adapt to the complications of confusion or anxiety as supplements to the basic procedures recommended for uncomplicated aphasia:

1 **Avoid asking the person to make decisions.** These individuals find any uncertainty unsettling, even if it is as simple a choice as the kind of juice to have for breakfast. Therapy tasks are often built around making choices, around pointing to pictures that go with words. It is generally better, however, to *tell* these persons what to say or do: "Good morning, Mr. Jones. When I say that, then you say, 'Good morning.' Now let's try it. Good morning Mr. Jones. And you say. . ." If reading seems helpful, write the answers to some set of questions and ask the person to read the answers to you. For example, you could print EGGS, TOAST, COFFEE and ask, "What did you have for breakfast, Mr. Jones?" Then help him read the answer from the list. Going over this kind of response repeatedly should help the responses to come without prompting.

2 **Lean particularly on words and materials the person knows** and uses overly well from habit. Again, nearly all persons who have aphasia can benefit from some practice in counting to ten; naming the days of the week; replying to a standard greeting with, "Fine. How are you?"; singing familiar songs, etc. The more confusion or anxiety shown, the more useful are such exercises. Success in doing them well will encourage a relaxed optimism, which, in turn, should bring on more successes.

3 **Put on the calming, soothing manner of the "old country doctor."** Don't overwhelm with bustling good cheer. Rather, show quiet confidence through easy movement and warm smiles. Point out how much better speech becomes when the person takes time and accepts the fact that he or she must often "tell it later."

Additional Information

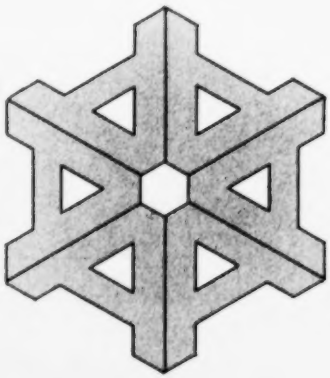
In recent years hospitals, rehabilitation centers, colleges and universities, and state health departments have employed increasing numbers of speech-language pathologists who can help and advise you in working with an adult who has aphasia. Many of these professionals, such as the author of this booklet, work in Veterans Administration Medical Centers throughout the country. There may be a professionally trained person closer to you than you realize, and, if at all possible, you should seek his or her help when speech-language therapy is needed.

Inquiries for additional information may be addressed to the following:

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, MD 20852

National Easter Seal Society
2023 W. Ogden Ave.
Chicago, IL 60612, or to the
Easter Seal Society in your community

U.S. Department of Health and Human Services
Public Health Service
National Institute of Neurological
and Communicative Disorders and Stroke
National Institutes of Health, Bldg. #31
9000 Rockville Pike
Bethesda, MD 20205



20

National Easter Seal Society
2023 West Ogden Avenue
Chicago, Illinois 60612